AMENDMENTS TO THE SPECIFICATION

Amend paragraph [0050] as follows:

[0050]

Fig. 1 is a graph showing a two-dimensional clothoid curve in an xy coordinate system;

Fig. 2 is a view showing the shape of a typical two-dimensional clothoid curve;

Fig. 3 is a view explaining the definition of a pitch angle α and a yaw angle β of a three-dimensional clothoid curve;

Fig. 4 is a view showing the shape of a typical three-dimensional clothoid curve;

Fig. 5 is a view showing an amount of changes in a unit normal vector;

Fig. 6 is a view showing two three-dimensional clothoid curves which are identical in their sizes and shapes to each other but are opposite in their directions to each other;

Fig. 7 is an illustration explaining dividing a three-dimensional clothoid curve;

Fig. 8 is an illustration explaining conditions for G2-continuous interpolation;

Fig. 9 conceptually shows osculating planes;

Fig. 10 is a flowchart outlining the procedures necessary for clothoid interpolation;

Fit. 11 is a flowchart outlining the procedures for the clothoid interpolation satisfying conditions of the G2 continuity;

Fig. 12 is a view showing three-dimensional clothoid interpolation for points P1, P2 and P3;

Fig. 13 is a view showing 3D Discrete Clothoid Splines of r=4;

Fig. 14 is an illustration for the 3D Discrete Clothoid Splines;

Fig. 15 is a perspective view of a three-dimensional Clothoid curve produced with the interpolation;

Fig. 16 is a graph showing changes in curvature, in which an axis of abscissas represents a moved distance and an axis of ordinate represents the curvature;

Fig. 17 is a flowchart outlining the three-dimensional clothoid interpolation that controls values at both end points;

Fig. 18 is an outlined view explaining the three-dimensional clothoid interpolation that controls values at both end points;

Fig. 19 is a perspective view showing results interpolated actually;

Fig. 20 is a graph showing the relationship between a distance moved from a starting point of each curve and a curvature of each curve;

Fig. 21 is a view showing control of values at a middle point;

Fig. 22 is a flowchart outlining an interpolation method that uses three-dimensional clothoids controlling each value at a starting point and an end point;

Fig. 23 is a view showing 3D Discrete Clothoid Splines of r=4;

Fig. 24 is a view showing a produced polygon;

Fig. 25 is a view explaining the three-dimensional clothoid curve for respective points P1, P2 and P3;

Fig. 26 is a view showing both produced curves and polygon;

Fig. 27 is a view showing a curve into which points are inserted;

Fig. 28 is a view showing divided three-dimensional clothoid curves;

Fig. 29 is a perspective view showing a produced curve;

Fig. 30 is a graph showing the relationship between a distance s moved from a starting point of each curve and a curvature κ of each curve;

Fig. 31 is a perspective view showing a deflector type of ball screw in which a deflector is produced separately from a nut;

Fig. 32 is a perspective view showing a nut to be combined with a ball screw of which deflector composes one device with the nut;

Fig. 33A is a perspective view illustrating the nut in a state where a ball circulating groove can be seen;

Fig. 33B is a perspective view illustrating the nut in a state where a load ball rolling groove can be seen;

Fig. 34 is a side view showing a state where the nut is combined with a screw shaft;

Fig. 35 is a development elevation showing the circulating path of a conventional ball screw;

Fig. 36 is a graph showing curvatures of the circulating path of a conventional ball screw;

Fig. 37 is a view showing a trajectory depicted the center of a ball;

Fig. 38 shows a coordinate system;

Fig. 39 shows a coordinate system viewed downward along a z-axis;

Fig. 40 is a view showing a trajectory curve depicted by the center of a ball moving along a thread groove;

Fig. 41 is a view showing curves C0 and C1 viewed downward along a y-axis;

Fig. 42 is a view showing the curves C0 and C1 located in the vicinity of a point Ps, which is viewed downward along the z-axis;

Fig. 43 is a view showing a curve into which a point P2 is inserted;

Fig. 44 is a view showing the curve C0 and a produced regression path; and

Fig. 45 is a graph showing the relationship between a distance moved from a point Pe and a curvature [[;]]

~~Fig. 46 is a view for explaining a two-dimensional clothoid curve in the xy coordinate system;~~

~~Fig. 47 is a two-dimensional clothoid curve;~~

~~Fig. 48 is a view for explaining α and β of a three-dimensional clothoid curve;~~

~~Fig. 49 is a view showing a typical three-dimensional clothoid curve;~~

~~Fig. 50 is an illustration explaining conditions for G2 continuous interpolation;~~

~~Fig. 51 conceptually shows contacted surfaces;~~

~~Fig. 52 is a flowchart outlining the procedures necessary for clothoid interpolation;~~

~~Fit. 53 is a flowchart outlining the procedures for the clothoid interpolation satisfying conditions of the G2 continuity;~~

~~Fig. 54 is a view showing three-dimensional clothoid interpolation for points P1, P2 and P3;~~

~~Fig. 55 is a view showing 3D Discrete Clothoid Splines of r=4;~~

~~Fig. 56 is an illustration for the 3D Discrete Clothoid Splines;~~

~~Fig. 57 is a perspective view of a three-dimensional clothoid curve produced with the interpolation;~~

~~Fig. 58 is a graph showing changes in curvature, in which an axis of abscissas represents a moved distance and an axis of ordinate represents the curvature;~~

~~Fig. 59 is a flowchart outlining the three-dimensional clothoid interpolation that controls values at both end points;~~

~~Fig. 60 is an outlined view explaining the three-dimensional clothoid interpolation that controls values at both end points;~~

~~Fig. 61 is a perspective view showing results interpolated actually;~~

~~Fig. 62 is a graph showing the relationship between a distance moved from a starting point of each curve and a curvature of each curve;~~

~~Fig. 63 is a view showing control of values at a middle point;~~

~~Fig. 64 is a flowchart outlining an interpolation method that uses three-dimensional clothoids controlling each value at a starting point and an end point;~~

~~Fig. 65 is a view showing 3D Discrete Clothoid Splines of r=4;~~

~~Fig. 66 is a view showing a produced polygon;~~

~~Fig. 67 is a view explaining the three-dimensional clothoid curve for respective points P1, P2 and P3;~~

~~Fig. 68 is a view showing both produced curves and polygon;~~

~~Fig. 69 is a view showing a curve into which points are inserted;~~

~~Fig. 70 is a view showing divided three-dimensional clothoid curves;~~

~~Fig. 71 is a perspective view showing a produced curve;~~

~~Fig. 72 is a graph showing the relationship between a distance s moved from a starting point of each curve and a curvature κ of each curve;~~

~~Fig. 73 is a flowchart explaining how to perform a numerical control method; and~~

~~Fig. 74 is a graph showing a conventional spline curve, which is introduced for the comparison~~.